

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 to 4: (canceled).

5 (currently amended): Steel superior in machinability ~~as set forth in claim 1~~
comprised of, by wt%,

C: 0.005 to 0.2%,

Si: 0.001 to 0.5%,

Mn: 0.2 to 3.0%,

P: 0.001 to 0.2%,

T.N: 0.002 to 0.02%,

T.O: 0.0005 to 0.035%,

said steel characterized by further restricting the amount of S to 0.25 to 0.75 wt% and the amount of B to 0.002 to 0.014 wt%, by containing amounts of S and B in a region surrounded by A, B, C, and D shown in FIG. 4 where the contents of S and B satisfy the following equation (1), and by containing sulfides with BN precipitated in MnS:

$$(B-0.008)^2/0.006^2 + (S-0.5)^2/0.25^2 \leq 1 \dots (1)$$

the balance of Fe and unavoidable impurities, said steel satisfying one or both of Mn/S in the steel being 1.2 to 2.8 or an area ratio of pearlite over a grain size of 1 μm in a microstructure of the steel being not more than 5%, and

having a density of MnS having a circle equivalent diameter of 0.1 to 0.5 μm at a cross-section parallel to a rolling direction of the steel material, taken from an extraction replica and observed by a transmission electron microscope, of at least 10,000/mm².

6 (currently amended): Steel superior in machinability as set forth in claim 4
~~or 2 5~~, said steel characterized by further containing, by wt%, one or more of,

V: 0.05 to 1.0%,

Nb: 0.005 to 0.2%,

Cr: 0.01 to 2.0%,

Mo: 0.05 to 1.0%,

W: 0.5 to 1.0%,

Ni: 0.05 to 2.0%,

Cu: 0.01 to 2.0%,

Sn: 0.005 to 2.0%,

Zn: 0.0005 to 0.5%,

Ti: 0.0005 to 0.1%,

Ca: 0.0002 to 0.005%,

Zr: 0.0005 to 0.1%,

Mg: 0.0003 to 0.005%,

Te: 0.0003 to 0.05%,

Bi: 0.005 to 0.5%,

Pb: 0.01 to 0.5%, and

Al: $\leq 0.015\%$.